

## **REMARKS**

This communication accompanies a request for continued examination. Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

As shown in the listing of claims, claims 1, 3-5, 11 and 20 are amended, claims 13-15 are canceled, and claims 36 and 37 are new.

Claim 1 was amended by the incorporation of claims 14 and 15, thus, claim 1 is now essentially unamended claims 14 and 15. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier. New claims 36 and 37 find support throughout the specification as originally filed, in particular, in original claims 3 and 4 and at paragraphs 14 and 16 of the application as originally filed. No new matter has been added by way of amendment.

After amending the claims as shown, claims 1-12, 16-23, 36, and 37 will be pending in the application.

### **I. Claim 20**

Applicants appreciate the Examiner's close reading and agree that "or" should be inserted into claim 20. Claim 20 has been amended accordingly.

### **II. Rejections Under ODP**

Claims 1-20, 22, and 23 are provisionally rejected for obviousness-type double patenting (ODP) over claims 1-8, 20, 21, and 25-28 of co-pending U.S. Application No. 11/230,114. As of August 6, 2008, the '114 application was still pending and thus the rejection remains provisional. Applicants note that the M.P.E.P. addresses this situation at § 804 I.B.1., stating that

If a "provisional" nonstatutory obviousness-type double patenting (ODP) rejection is the only rejection remaining in the earlier filed of the two pending applications, while the later filed application is rejectable on other grounds, the examiner should withdraw that rejection and permit the earlier-filed application

to issue as a patent without a terminal disclaimer...If both applications are filed on the same day, the examiner should determine which application claims the base invention and which application claims the improvement (added limitations). The ODP rejection in the base application can be withdrawn without a terminal disclaimer.

As Applicants believe that the other rejections pending in the application have been overcome for the reasons below, Applicants respectfully request that the Examiner follow the procedure set forth at M.P.E.P. § 804 I.B.1. and withdraw the provisional rejection over the '114 application. In requesting the withdrawal of the ODP rejection, Applicants make no statements regarding the propriety of the rejection, and respectfully reserve the right to challenge such propriety, or file a terminal disclaimer over the '114 application.

## **II. Rejections Under 35 U.S.C § 112**

Claims 3, 4, 11 and 14 are rejected under 35 U.S.C. § 112 ¶ 2 as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. In view of the amendments to the claims, Applicants respectfully traverse the rejections.

Claims 3 and 4 have been amended to list species that have carboxylate groups.

Claim 11 has been amended as suggested by the examiner.

Claims 13 and 14 have been cancelled, thus rendering moot the rejection of these claims.

In view of the amendments, Applicants respectfully request withdrawal of the rejections.

## **III. Rejections Under 35 U.S.C § 102/103**

Claims 1-4, 7-13, and 16-23 stand rejected under 35 U.S.C. § 102(b) as anticipated or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Wickert *et al.* (U.S. 6,214,450). Applicants respectfully traverse these rejections.

Claim 1 has been amended to recite the limitations of both claims 14 and 15. Claims 14 and 15 were acknowledged by the Examiner to be free of the cited art of Wickert.

Claims 1-13 and 16-23 stand rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Gower *et al.* (U.S. 3,647,732). Applicants respectfully traverse these rejections.

Claim 1 has been amended to recite the limitations of both claims 14 and 15. Claims 14 and 15 were acknowledged by the Examiner to be free of the cited art of Gower.

As Applicants believe that these rejections to now be moot, withdrawal of these rejections is respectfully solicited.

#### **IV. Rejections Under 35 U.S.C § 103**

Claims 1-7, 7-13 and 16-23 stand separately rejected under 35 U.S.C. § 103(a) as obvious over Wickert. As pointed out above, claim 1 has been amended with the subject matter of claims 14 and 15, shown by the Examiner to be free Wickert as cited art. As such, Applicant respectfully requests withdrawal of these rejections.

*Gower / Rogers '196 / Rogers '078 / Stewart '983*

Claims 1-23 stand rejected under 35 U.S.C. § 103(a) as obvious over Gower in view of U.S. 3,320,196 issued to Rogers *et al.* (Rogers '196), U.S. 3,308,078 also issued to Rogers *et al.* (Rogers '078), and GB 1 337 983 issued to Stewart *et al.* The Examiner states that because Gower teaches the use of fatty acids in stabilizing AZC and because Stewart teaches acids and sugars for the stabilization of AZC, that the instantly claimed invention is obvious. Office Action pages 5 and 6. Applicants respectfully traverse these rejections.

Applicants submit that the proposed combination does not make the presently claimed invention obvious, as there is no suggestion in either Gower or Stewart of compositions containing both a metal cross-linking agent and a carboxylate containing polymer that is stable for the claimed amount of time and which uses the stated stabilization agents. Claim 1 as currently pending recites:

*A composition comprising a water-borne polymer comprising carboxylate groups; a metal cross-linking agent; and a stabilizing agent comprising from 2 to 10 carbon atoms and at least two functional groups independently selected from hydroxy and carboxy, wherein the amount*

of stabilizing agent is 1.4 mole percent or more of the amount of cross-linking agent;

wherein *the composition is stable for at least a month at 40°C and up to six months at room temperature*; and

wherein the stabilizing agent is selected from tartaric acid, gluconic acid, mucic acid, saccharic acid, oxalic acid, glycolic acid, lactic acid, malic acid, citric acid, mandelic acid, malonic acid, maleic acid, succinic acid, glutaric acid, mannitol, fructose, glucose, a salt thereof, or a mixture of two or more thereof.

Emphasis added. The stability portion of the claim, while functional, is an integral element of the claim that must be given its full weight in determining the scope of the claim. Thus, not only are all of the recited chemical components required, but those components must provide a composition that is stable for at least a month at 40°C and up to six months at room temperature.

#### *Gower Fails On At Least Two Fronts*

Applicants submit that Gower fails in at least two respects: first, Gower fails to teach or suggest the claimed stabilizing agents, second, Gower fails to teach or suggest the claimed stability requirements. The Examiner has already acknowledged the first point (Office Action, pages 5-6), and therefore Applicants address the second point below.

Gower is directed to coating compositions for floor polishes, etc., that use a polymer with a metal cross linking agent. Col. 1, lines 35-40. Gower requires the use of long chain fatty acids as a stabilizing agent for the AZC (ammonium zirconyl carbonate) that is used. While the Examiner alleges that because the compositions of Gower are coating compositions, they must have shelf life and therefore the claimed stability characteristics. However, Applicants contend that this is not necessarily the case, and for a case of inherency to hold, the result must necessarily flow from the teachings of the references. MPEP § 2112(IV). As further stated in MPEP §2112 (IV):

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) ...“To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be

established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.”... Also, “[a]n invitation to investigate is not an inherent disclosure” where a prior art reference “discloses no more than a broad genus of potential applications of its discoveries.”...

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original) (

Some citations omitted, emphasis in original.

All of the examples show that the compositions are mixed, allowed to stand overnight, and used to coat a substrate. See Examples IV-IX of Gower where a metal cross-linking agent is used. In fact, the Examples all describe the addition of the metal complex in the last step. In other words, the compositions could contain separated emulsion and metal complex only to be added together in a final step before application. Thus, without more description in Gower, it cannot be stated that the claimed stability features necessarily flow from the teachings of Gower.

#### *Stewart Teaches Away*

Applicants also assert that Stewart actually teaches away from the claimed compositions. Stewart describes the use of hydroxy carboxylic acids or other hydroxy compounds for the stabilization of ammonium zirconium carbonate solutions. Col. 2, lines 12-22. However, Stewart fails to teach the compositions of the presently claimed invention that contain a polymer with carboxylate groups, metal cross-linking agent, and stabilization agent. Although Stewart describes the stabilization of an AZC solution (no carboxylate containing polymer added), Stewart does not teach the claimed compositions of the claimed stability. In fact, Stewart teaches that the zirconyl solutions are used externally from polymer solutions, thus the stability of a zirconyl solution alone was taught – not a composition with the polymer having carboxylate groups. Col. 1, lines 46-51 set this forth explicitly:

An illustration of their [insolubilising agents such as salts of zirconium] application is provided by the use of zirconium acetate solution as a *wash*

*liquid* which is applied to a coating of starch on paper in order to render the starch coating insoluble.

In other words, the zirconium solutions were to be used as an insolubilizing agent separately from a coating composition. Thus, Stewart actually teaches away from the claimed compositions which recite the combination of a single composition having the polymer with carboxylate groups, the metal cross-linking agent, and the stabilizing agent of the stated identity.

#### *Rogers '196 and Rogers '078*

While the § 103 rejection cites to the Rogers' references, there is no discussion in that section of why these are relevant to the noted rejection. However, in the section above, the Examiner states that the Rogers' references are relied upon for the teaching of acid number and the use of a styrene/acrylic copolymer. Office Action, page 5. The Rogers references are both directed, at least in part, to metal-fugitive ligand complexes where the complex undergoes ligand exchange with carboxyl groups on an organic film former. See Rogers '078 col. 17, lines 10-15 and Rogers '196 col. 15, lines 54-59. The Rogers' references also describe that the cation of the metal-fugitive complex should also be fugitive and describe cations such as ammonium. See Rogers '078 col. 17, lines 10-43 and Rogers '196 col. 15, line 60-col. 16, line 72. However, the Rogers' references suffer similarly to Gower, in that the claimed stabilization agents are not disclosed or discussed in the references.

#### *Conclusions*

As shown above, Applicants submit that Gower fails on two fronts. First, Gower (and the two Rogers' references) fails to teach, suggest, or give reason to one of skill in the art to use at least the claimed stabilization agents. And, second, Gower fails to teach or suggest to one of skill in the art that the compositions of Gower inherently have the claimed stability characteristics. Also, as shown above, Applicants submit that Stewart fails to teach, suggest, or give reason to one of skill in the art to use a stabilizing agent in a zirconyl solution that is in a composition with a carboxylate containing polymer. In fact, Stewart teaches zirconyl compositions that are separate from the polymers, and, thus, this is tantamount to a teaching away from such a composition.

In view of the above remarks and amendments, Applicants believe the application to be in condition for allowance and request that the Examiner withdraw the rejections and allow the application to move forward to issuance. Favorable reconsideration of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

Date August 12, 2008

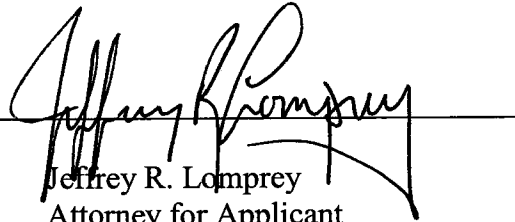
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